

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF CONSOLIDATED LABORATORY
SERVICES
600 NORTH 5TH STREET
RICHMOND, VIRGINIA 23219**

1-866-493-1087

SDWA PHASE II & V SOC KIT SAMPLING INSTRUCTIONS						
<table style="width:100%"><tr><td style="width:50%">CYANIDE / METHOD 335.2</td><td style="width:50%">SOC / METHOD 525.2</td></tr><tr><td>FUMIGANTS / METHOD 551</td><td>CARBAMATES / METHOD 531.1</td></tr><tr><td>HERBICIDES / METHOD 515.3</td><td>DIQUAT / METHOD 549.1</td></tr></table>	CYANIDE / METHOD 335.2	SOC / METHOD 525.2	FUMIGANTS / METHOD 551	CARBAMATES / METHOD 531.1	HERBICIDES / METHOD 515.3	DIQUAT / METHOD 549.1
CYANIDE / METHOD 335.2	SOC / METHOD 525.2					
FUMIGANTS / METHOD 551	CARBAMATES / METHOD 531.1					
HERBICIDES / METHOD 515.3	DIQUAT / METHOD 549.1					

Responding to your request for water analysis, laboratory personnel have prepared and shipped the appropriate sample containers. These bottles and/or vials contain the correct preservatives. **DO NOT RINSE THESE BOTTLES PRIOR TO FILLING.** Depending on the parameters to be determined, the number of bottles supplied will vary. If more than one source is to be sampled, it will be necessary to separate the bottles into sets. The label on each bottle will identify the type of sample (Ex.: SOC = Semi-Volatile Organic Chemicals; CYN3 = Cyanide; FUMI = Volatile Fumigants; HERB = Chlorinated Acid Herbicides).

SAMPLE FORM

1. Each sample kit comes with a pre-printed sample form.
2. Each sample form contains 2 peel-off labels to be placed on your sample bottle at the time of collection.
3. Before you begin your sample collection, fill out the information requested on this pre-printed form. The 2 pre-printed labels need the date and time of sample collection. When entering the time of collection, use Military Time (see example below).

Civilian	Military	Civilian	Military	Civilian	Military
6:00 AM	0600	10:15 AM	1015	1:00 PM	1300
7:30 AM	0730	11:00 AM	1100	3:25 PM	1525
9:00 AM	0900	12:00 Noon	1200	5:00 PM	1700

4. Under the labels, fill in the information requested on sample collector and give us a telephone number we can call if there is a problem with the sample shipment.
5. Remove a label from the sample form and place it on your sample container before collecting the sample. The labels stick better on a dry container.
6. Each sample bottle contains an identifying label that will match the sample container labels on the sample form (Ex.: INO is on the sample form and the peel-off labels and also on the sample bottle for Inorganic).
7. See the final page of these instructions for an example of the sample form.

SAMPLING PROCEDURE

1. Samples must be taken at a cold water tap, with all screens, filters, aerators, etc. removed.
2. Run the water long enough to clear all water which has been standing in the lines (5 to 10 minutes).
3. Adjust the water flow from the tap so that water is not aerated when the sample bottle is filled.
4. Take one of the sample containers and carefully remove the cap, taking care not to touch the inside of the cap or sample bottle. Do not remove the cap from more than one bottle at a time
5. Fill the sample bottle completely, including as little air as possible in the bottle.

6. After filling the bottle, cap tightly and check for leaks.
7. Ship the samples to the lab as soon as possible, preferably the same day as they were collected. The samples must be received by the laboratory **WITHIN 7 DAYS** after they are collected.
8. All samples must be cooled to 4°C (the temperature of most refrigerators) immediately after collecting and during shipment to the laboratory. The samples must be covered with ice in the shipping container provided, to maintain a temperature of 4°C.

NOTE: THE SAMPLES MUST BE KEPT ON ICE DURING SHIPPING. TRANSIT TIME EXCEEDING 48 HOURS MAY CAUSE YOUR SAMPLES TO COME TO ROOM TEMPERATURE AND RESULT IN THE SAMPLES BEING REJECTED BY THE LABORATORY. WHEN SCHEDULING RETURN SHIPPING, NOTE THAT THE LABORATORY DOES NOT RECEIVE SAMPLES ON WEEKENDS OR HOLIDAYS.

9. See the sampling instructions for specific kits for more details on collecting different sample types.

SAMPLE SHIPMENT

1. Place the sample containers in the shipping container/cooler provided by the lab.
2. Cover the samples with ice. Include enough ice to allow for some melting during shipping to the lab.
3. Put the Styrofoam lid on the cooler.
4. Place the Sample Report Forms in a separate Ziploc bag and seal the bag.

5. Place the bag with the forms on top of the Styrofoam lid and fold the cardboard flaps over the top enclosing the bag of forms with the cooler.
6. Tape the box and ship to the DCLS Laboratory using one of the following:
 - a. DCLS Courier Service. Call the Regional DDW Office or the lab for the location of the nearest pick-up point for the courier service. There is no charge for the courier service.
Laboratory Support Services: (804) 786-4453
 - b. UPS
 - c. Fed Ex
 - d. Personal Carrier

SEMI-VOLATILE ORGANIC CHEMICAL (EPA METHOD 525.2)

KIT CODE: SOC

Components

1. SOC SAMPLE FORM
2. INSTRUCTIONS – COLLECTION
3. TWO 1-LITER AMBER GLASS BOTTLES
4. ONE 1-LITER AMBER GLASS BOTTLE WITH WATER & ACID
(TRAVELING BLANK – DO NOT OPEN AND RETURN WITH SAMPLES)
5. TWO 5-ML VIALS CONTAINING 1:1 HYDROCHLORIC ACID
6. THREE BUBBLEWRAP SHEETS (To wrap sample bottles before shipping)
7. 12" x 15" ZIPLOC BAG (For returning sample form)
8. COOLER
9. RETURN ADDRESS LABEL



SAMPLING INSTRUCTIONS FOR SEMI-VOLATILES

1. Break the seal on the two sample bottles and carefully fill them to about $\frac{3}{4}$ full with the water being sampled. (Do not allow the water sample to come into contact with any plastics).
2. Replace the cap tightly on the bottle. Shake vigorously for one minute to mix the sample with the preservative.
3. Open 1 vial of acid (Small vial in your kit) and add all the solution to the 1st sample bottle.
4. Open the 2nd vial of acid and add all of the solution to the 2nd sample bottle.
5. Carefully fill both bottles to the top with the water being sampled.
6. Replace the caps tightly on the sample bottles and shake vigorously for one minute to mix the sample with the acid solution. Invert bottles and check for leaks.
7. SOC samples should be kept at 4°C after collection. Refrigerate the samples until you can pack them on ice for shipment.

See the general shipping instructions on page 3 & 4.

CYANIDE (EPA METHOD 335.2)

KIT CODE: CYN3

Components

1. CYANIDE SAMPLE FORM
2. ONE 1-LITER BROWN PLASTIC BOTTLE (Contains sodium hydroxide and ascorbic acid as preservatives).
3. INSTRUCTIONS – SAMPLING
4. 12" X 15" ZIPLOC BAG (For returning sample form)
5. COOLER
6. RETURN ADDRESS LABEL



Break the seal on the sample bottle and fill it carefully to the top with the water being sampled.

The bottle contains a small amount of sodium hydroxide as a preservative. Do not rinse this out of the bottle when collecting the sample.

Fill the container completely but avoid spilling liquid over the top since you may lose some of the preservative.

Replace the cap tightly on the bottle. Shake the bottle vigorously for one minute to mix the sample with the preservative. Invert bottle and check for leaks.

Cyanide samples should be kept at 4°C after collection. Refrigerate the samples until you can pack them on ice for shipping.

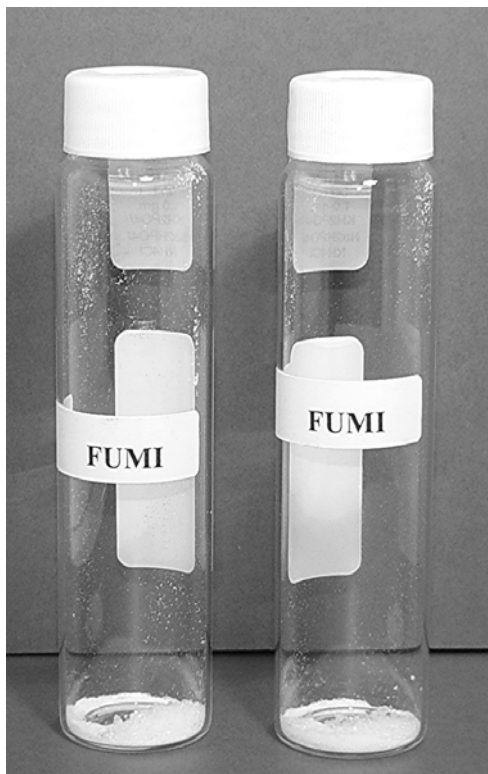
See the general shipping instructions on page 3 & 4.

VOLATILE FUMIGANTS (EPA METHOD 551)

KIT CODE: FUMI

Components

1. FUMIGANTS SAMPLE FORM
2. INSTRUCTIONS – SAMPLING
3. TWO 60-ML CLEAR GLASS VIALS
4. BUBBLEWRAP SHEET (For wrapping the sample vials before shipping)
5. 12" X 15" ZIPLOC BAG (For returning sample form)
6. COOLER
7. RETURN ADDRESS LABEL



Break the seal on the two sample vials and fill them carefully to the top with the water being sampled. (Fill the container completely but avoid spilling sample over the top since you may lose preservative).

Replace the cap tightly and avoid trapping air in the vials. If the septum falls out of the cap, replace it so that the thick silicone side faces up (toward the cap).

After capping, shake the vials vigorously for one minute to mix the sample with the preservative. Invert vials and check for leaks.

Volatile fumigant samples should be kept at 4°C after collection. Refrigerate the samples until you can pack them on ice for shipping.

NOTE: DO NOT RINSE THE PRESERVATIVE OUT OF THE VIALS.

See the general shipping instructions on page 3 & 4.

CHLORINATED ACID HERBICIDES KIT CODE: **HERB** (EPA METHOD 515.3)

Components

1. HERBICIDE SAMPLE FORM
2. TWO 250-ML AMBER GLASS BOTTLES
3. INSTRUCTIONS – SAMPLING
4. BUBBLEWRAP SHEET (For wrapping the sample bottles before shipping)
5. COOLER
6. 12" X 15" ZIPLOC BAG (For returning sample form)
7. RETURN ADDRESS LABEL



Break the seal on the two sample bottles and fill them carefully to the top with the water being sampled.

Fill the container completely but avoid spilling water over the top since you may lose preservative.

Replace the cap tightly on the bottle. Shake the bottles vigorously for one minute to mix the sample with the preservative. Invert the bottles and check for leaks.

Chlorinated acid herbicide samples should be kept at 4°C after collection. Refrigerate the samples until you can pack them on ice for shipping.

NOTE:

THERE ARE NO FIELD BLANKS FOR THIS METHOD. THE BOTTLES CONTAIN A SMALL AMOUNT OF CHEMICAL PRESERVATIVE. **DO NOT RINSE OUT THE PRESERVATIVE.**

See the general shipping instructions on page 3 & 4.

DIQUAT (EPA METHOD 549.1)

KIT CODE: **DIQT**

Components

1. DIQUAT SAMPLE FORM
2. TWO 250-ML BROWN PLASTIC BOTTLES
3. SOC INSTRUCTIONS – SAMPLING
4. 12" X 15" ZIPLOC BAG (For returning sample form)
5. COOLER
6. RETURN ADDRESS LABEL



Break the seal on the two sample bottles and fill them carefully to the top with the water being sampled.

Do not overfill the bottles or some of the preservative may be lost.

Replace the cap tightly on the bottle.

Shake the bottles vigorously for one minute to mix the sample with the preservative. Invert the bottles and check for leaks.

Diquat samples should be kept at 4°C after collection. Refrigerate the samples until you can pack them on ice for shipping.

IMPORTANT: THE SAMPLE FOR METHOD 549.1/DIQUAT

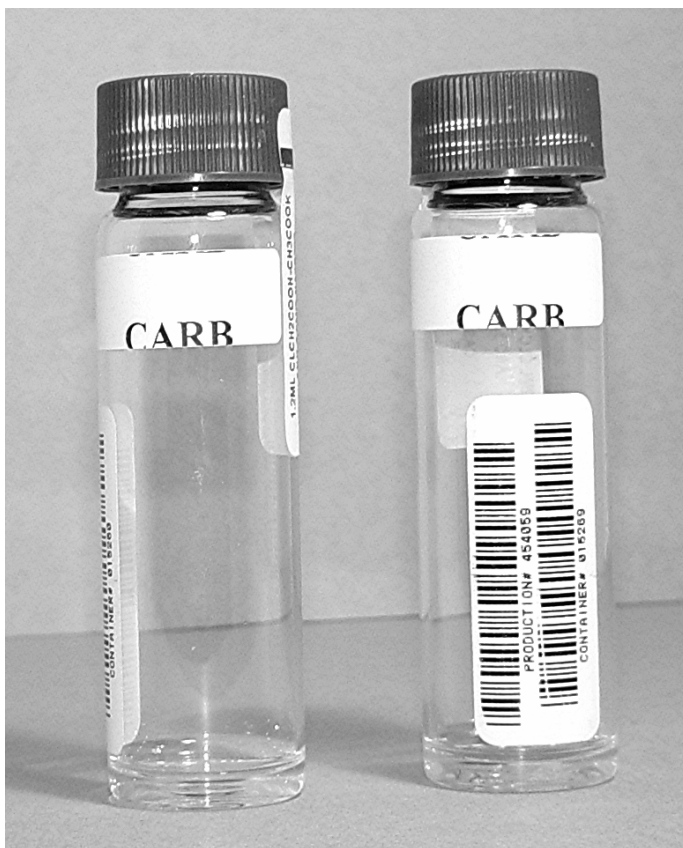
MUST BE RECEIVED IN THE LABORATORY WITHIN 2 DAYS AFTER COLLECTION.

See the general shipping instructions on page 3 & 4.

CARBAMATES (EPA METHOD 531.1) KIT CODE: CARB

Components

1. CARBAMATE SAMPLE FORM
2. TWO 40-ML CLEAR GLASS VIALS
3. SOC INSTRUCTIONS – COLLECTION
4. POLYFOAM VIAL HOLDER
5. 12" X 15" ZIPLOC BAG (For returning sample form)
6. COOLER
7. RETURN ADDRESS LABEL



Break the seal on the two sample vials and fill them carefully to the top with the water being sampled (Fill the container completely but avoid spilling fluids over the top since you may lose preservative).

Replace the cap tightly and avoid trapping air in the vials. If the septum falls out of the cap, replace it so that the thick silicone side faces up (toward the cap).

After capping the vials, shake vigorously for one minute to mix the sample with the preservative.

Carbamate samples should be kept at 4°C after collection. Refrigerate the samples until you can pack them on ice for shipping.

NOTE: THERE ARE NO FIELD BLANKS FOR THIS METHOD. THE VIALS FOR SAMPLE COLLECTION CONTAIN A SMALL AMOUNT OF CHEMICAL PRESERVATIVE. DO NOT RINSE IT OUT WHEN COLLECTING THE SAMPLE.

See the general shipping instructions on page 3 & 4.

Make any corrections to
Your Mailing Address

Peel-off Sample Labels
for Sample Vials

DGS-22-202 (REV 4/02) ORDER #11562 ADDRESS CHANGE		PWSID: 2187406 Waterworks: FRONT ROYAL, TOWN OF Source: INTAKE RAW WATER Facility: IN001 Location: INTAKE RAW WATER Sample Type: RT Compliance: Y			
NAME _____ COMPANY _____ ADDRESS _____ CITY _____ ST _____ ZIP _____	Mailing Address Mr. B. Keith Will FRONT ROYAL, TOWN OF 1 AQUEDUCT LANE P O BOX 1560 FRONT ROYAL, VA 22630				
TOCL Matches label on sample container	Use Ball Point Pen. Press Firmly. Place Peel-off Label on Bottle(s). Use Military Times. Please complete for Lead & Copper or Fluoride Samples: <table border="1"> <tr> <td> Lead/Copper Date Last Used: / / Time Last Used: Military Time </td> <td> Fluoride (Check one) <input type="checkbox"/> Colorimetric <input type="checkbox"/> Electrode _____ ppm </td> </tr> </table>			Lead/Copper Date Last Used: / / Time Last Used: Military Time	Fluoride (Check one) <input type="checkbox"/> Colorimetric <input type="checkbox"/> Electrode _____ ppm
Lead/Copper Date Last Used: / / Time Last Used: Military Time	Fluoride (Check one) <input type="checkbox"/> Colorimetric <input type="checkbox"/> Electrode _____ ppm				
Sample Container: TOCL Date / Time Collected: _____ * 9 2 4 3 2 1 * Military Time		Sample Container: TOCL Date / Time Collected: _____ * 9 2 4 3 2 1 * Military Time			
Collected By: _____ Phone # () _____		Kit Type			

Print Collector's Name and Phone Number
where we can call if there is a problem

SAMPLE FORM